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A8

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/114,414	07/13/98	HOWARD M	3176-5280

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QM12/0203

EXAMINER	
MANTIS MERCADER,E	
ART UNIT	**PAPER NUMBER**
3737	6

DATE MAILED: 02/03/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.	Applicant(s)
09/114,414	Howard et al.
Examiner	**Group Art Unit**
Eleni Mantis Mercader	3737

☒ Responsive to communication(s) filed on *Jul 13, 1998* .

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire *3* month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) *1-11* is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) *1-11* is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐approved ☐disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____ .

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____ .

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). *5*

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

DETAILED ACTION

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claim Rejections - 35 USC § 112

1. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 4 are vague and indefinite as they are incomplete. The preamble states " a stereotactic system for treatment delivery" yet in the body of the claims there is no positive recitation of the means which is used for treatment delivery and its connection with the stereotactic system.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Howard, III et al. (U.S. Patent No. 4,869,247 of record, hereinafter Howard et al.'247)Tillander (U.S. Patent No. 3,674,014 of record, hereinafter Tillander'014).

Howard et al.'247 teach the use of real-time fluoroscopic data to manipulate a magnetic object through a patient and the use of electromagnets to provide the magnetic field necessary to guide the magetic object (col. 5, lines 1-65). Howard et al.'247 do not teach the use of multiple coils for guiding a magnetic object or the use of two X-ray heads.

Tillander'014 teaches the use of a catheter for treatment with a plurality of permanent magnetic tubular sections (col. 2, lines 51-59) being guided with an externally applied magnetic field (col. 3, lines 14-31). While X-ray imaging being used to guide the position of the catheter is stated as a teaching well known to those skilled in the art (col. 1, lines 33-35).

It would have been obvious to one skilled in the art at the time the invention was made to have modified Howard et al.'247 and incorporated the teaching of Tillander'014 to use multiple magnets in order to guide a catheter at an area of interest for treatment. It would also have been obvious to one skilled in the art to have modified the fluoroscope as used by Howard et al.'247 to determine the position of the catheter and used the X-ray device to acquire an adequate number of images from different positions in order to accurately determine the real-time location of the catheter or have used two-X-ray heads and two detectors which would be a functional equivalent

for deriving an adequate number of images without the need of moving the X-ray device. Furthermore, it would have been obvious to one skilled in the art at the time the invention was made based on the general knowledge of an artisan, that a number of coils could be used in order to more effectively manipulate the magnetic fields guiding the object, especially if the object incorporated multiple magnets such as in the catheter as disclosed by Tillander'014.

Conclusion

4. The art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicants are invited to comment on the following reference:

Ueda et al.'260 (U.S. Patent No. 5,681,260) teaches the use of multiple driving magnetic field generators to guide a catheter with multiple magnets incorporated therein (see Fig. 16 and col. 13, lines 15-39).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eleni Mantis Mercader whose telephone number is (703) 308-0899. The examiner's supervisor, Mr. Marvin Lateef, can be reached on (703) 308-3256.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0858. The fax phone number for this group is (703) 308-0758.

EMM
January 03, 2000.

Marvin M. Lateef
Supervisory Patent Examiner
Group 3700